

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of Steinke <i>et al.</i>	Atty Docket No.: A4-047 US
Application Serial No.: 10/597,434	Conf. #: 1916
Filed: July 25, 2006	Examiner: Michael C. Zarroli
For: Modular Jack Connector System	Art Unit: 2839

**INTERVIEW SUMMARY AND APPROVED CHANGES FOR EXAMINER  
AMENDMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The commissioner is authorized to charge any necessary fees or credit any overpayment to Deposit Account No. 50-1873. Applicants request reconsideration in view of the following:

**Proposed Examiner Amendments to the Claims** are found in the Listing of Claims, which begins on page 2 of the paper.

**Remarks** begin on page 7 of this paper.

**AUTHORIZED EXAMINER AMENDMENTS TO THE CLAIMS**

The following Listing of Claims includes changes that Applicants authorized the Examiner to enter in the application as an Examiner's Amendment.

**Listing of Claims:**

1. (Currently Amended) A modular electrical jack connector system comprising:
  - i) a first inside jack connector housing-~~(100)~~ having a first side and a second side that face opposite to each other, ii) a first outside jack connector housing-~~(101)~~ interconnected with the first inside jack connector housing-~~(100)~~ at the first side, and iii) a second outside jack connector housing-~~(102)~~ interconnected with the first inside jack connector housing-~~(100)~~ at the second side; and
  - a jack connector-subassembly-~~(200)~~ inserted into each of the jack connector housing ~~(100, 101, 102)~~;
  - wherein the jack connector housings-~~(100, 101, 102)~~ are configured as an assembly of modular adjacent connector housings that are arranged in a row; and
  - wherein each of the jack connector housings-~~(100, 101, 102)~~ comprises i) a front coupling side having at least two openings-~~(110, 111)~~ which openings-~~(110, 111)~~ are disposed one above the other for the purpose of receiving a plurality of electrical plug connectors through the front coupling side and ii) a rear side-~~(112)~~ for the purpose of inserting the jack connector subassembly-~~(200)~~, the rear side being oppositely disposed with respect to the front coupling side; and
  - wherein each jack connector subassembly-~~(200)~~ comprises a longitudinal strip-like carrier ~~(250)~~ having a substantially right-angled profile and having on the top and on the bottom respectively a series of extrusion-coated or injection-molded jack terminals-~~(260)~~, wherein the extrusion-coated or injection-molded jack terminals-~~(260)~~ embody at a front end of the strip-like carrier uncoated and bent-back cantilevered contact portions-~~(265, 266)~~, and wherein the uncoated and bent-back cantilevered contact portions-~~(265, 266)~~ are disposed aligned in an upper opening-~~(110)~~ and/or into a lower opening-~~(111)~~ of the jack connector housing ~~(100, 101, 102)~~.
2. (Currently Amended) The modular electrical jack connector system of claim 1 wherein each jack connector housing is formed out of a plastic material and is adapted for the

purpose of receiving one jack connector subassembly-(200).

3. (Currently Amended) The modular electrical jack connector system of claim 1 wherein respectively one metallic shield-(500) is inserted between individual adjacently strung jack connector housings-(100, 101, 102).

4. (Currently Amended) The modular electrical jack connector system of claim 1 wherein the strip-like carrier-(250) is modularly constructed out of two stackable carrier halves wherein each half comprises an extrusion-coated or injection-molded arrangement of jack terminals.

5. (Currently Amended) The modular electrical jack connector system of claim 4 wherein a metallic shield plate-(270) is disposed sandwich-like between two carrier halves.

6. (Currently Amended) The modular electrical jack connector system of claim 1 wherein the extrusion-coating of the jack connectors up to the uncoated area of the contact portions-(265, 256) forms a bump or knuckle-like thickening-(269).

7. (Currently Amended) The modular electrical jack connector system of claim 1 wherein the strip-like carrier is modularly constructed out of two stackable identical carrier halves-(251, 252) and wherein each carrier half respectively comprises a complementarily formed engaging device-(253a, 253b, 254a, 254b).

8. (Currently Amended) The modular electrical jack connector system of claim 1 wherein for the purpose of signal conditioning the jack connector subassembly comprises correspondingly adapted component modules-(280, 261) which correspondingly adapted component modules-(280, 281) are disposed at least adjacently with respect to a top surface of the strip-like carrier.

9. (Previously Presented) The modular electrical jack connector system of claim 1 wherein a plurality of different conditioning component modules is connectable with the jack

connector subassembly.

10. (Currently Amended) The modular electrical jack connector system of claim 1 wherein the jack connector subassembly comprises a plurality of signal pins ~~(220)~~ which signal pins ~~(220)~~ extend outwards on one side.

11. (Previously Presented) The modular electrical jack connector system of claim 1 wherein the jack connector subassembly comprises pins for an inline power supply.

12. (Currently Amended) The modular electrical jack connector system of claim 1 wherein the jack connector subassembly comprises two separated carrier plates ~~(210)~~ and particularly printed circuit boards for the purpose of mechanically holding together the components and their electrical circuitry encompassed by the jack connector subassembly.

13. (Currently Amended) The modular electrical jack connector system of claim 12, wherein between the carrier plates ~~(210)~~ is disposed the strip-like carrier ~~(250)~~.

14. (Currently Amended) The modular electrical jack connector system of claim 12 wherein is disposed between the carrier plates ~~(210)~~ at least one electrical/electronic components encompassing box-type module ~~(280, 281)~~.

15. (Currently Amended) The modular electrical jack connector system of claim 12 wherein on the outside of the carrier plates are disposed electrical/electronic components ~~(255)~~.

16. (Previously Presented) The modular electrical jack connector system of claim 1 wherein the jack connector subassembly is equipped with LED pins.

17. (Currently Amended) The modular electrical jack connector system of claim 16 wherein the jack connector subassembly comprises at least one right-angularly radiating LED ~~(290)~~ whose light is forwardly and outwardly guidable via a wave-guide ~~(291)~~ to the front coupling side.

18. (Currently Amended) The modular electrical jack connector system of claim 17 wherein each of the jack connector housings ~~(100, 101, 102)~~ is formed with guiding channels ~~(180)~~ for the purpose of receiving the wave-guide.

19. (Currently Amended) The modular electrical jack connector system of claim 1 wherein the jack connector housings are disposed on at least one earth plate ~~(400)~~ and particularly a printed circuit board which printed circuit board comprises openings ~~(410)~~ for the purpose of receiving guided signal pins ~~(220)~~ of the jack connector subassembly.

20. (Currently Amended) The modular electrical jack connector system of claim 19 wherein the earth plate ~~(400)~~ simultaneously carries further electrical/electronic components.

21. (Currently Amended) The modular electrical jack connector system of claim 19 wherein the earth plate ~~(400)~~ comprises a sandwich-like multi-layered composite structure.

22. (Currently Amended) The modular electrical jack connector system of claim 1 wherein the jack connector housings are encompassed by an external shield housing ~~(300)~~.

23. (Currently Amended) The modular electrical jack connector system of claim 22 wherein each inserted jack connector-subassembly ~~(200)~~ is directly soldered to the external shield housing ~~(300)~~.

24. (Currently Amended) The modular electrical jack connector system of claim 22 wherein the external shield housing is constructed in two portions wherein the first portion ~~(315)~~ is attachable to the jack connector housings from the front coupling side of the jack connector housings and wherein the second shield portion ~~(320)~~ is solderable to the first portion ~~(315)~~ and is attachable to the jack connector housings from the rear side of the jack connector housings.

25. (Currently Amended) The modular electrical jack connector system of claim 1 wherein for the purpose of arranging the jack connector housings adjacently, the jack connector

housings comprise respectively complementarily developed fastening devices-~~(115, 116)~~.

26. (Currently Amended) The modular electrical jack connector system of claim 1 wherein at least intermediately strung and/or stringable jack connector housings-~~(100)~~ are identically constructed.

27. (Currently Amended) A jack connector housing-~~(100)~~ for a modular electrical jack connector system, the jack connector housing-~~(100)~~ comprising:

a first side and a second side that face opposite to each other, wherein the first side and the second side are adapted to interconnect with a first additional jack connector housing-~~(101)~~ and a second additional jack connector housing-~~(102)~~, respectively;

a front coupling side having at least two openings-~~(110, 111)~~ which openings-~~(110, 111)~~ are disposed one above the other for the purpose of receiving a plurality of electrical plug connectors through to the front coupling side; and

a rear side-~~(112)~~ for the purpose of inserting a jack connector subassembly-~~(200)~~, the rear side being oppositely disposed with respect to the front coupling side;

wherein the jack connector housing is modularly arrangeable in a row with and adjacent to at least the first additional jack connector housing.

Claims 28-30. (Cancelled)

**REMARKS/ARGUMENTS**

Applicants' representative would like to express his appreciation for the time taken by the Examiner to discuss this case on October 15, 2009. The Examiner noted that if claims 28-30 were cancelled, the remaining claims would be in condition for allowance. The Examiner further indicated that he would be willing to make the changes in an Examiner's Amendment. Applicants' representative noted that the pending claims included reference numbers (as is common in European practice) and to ensure the claims better comport with US patent practice, wanted to delete the reference numbers as they were never intended to limit the claims. Agreement was reached during the interview and the Examiner's Amendment was authorized. Applicants' representative, in order to ensure the public record is clear, provides this paper detailing this interview and discussion. These amended claims were also provided in an email to the Examiner to facilitate entry of the changes as there were a number of claims that required amendment to remove the reference numbers.

Accordingly, this paper details the authorized Examiner's Amendment, including the cancelling of claims 28-30 with prejudice or disclaimer and the removing of the reference labels from the claims so as to avoid any suggestion that the references might otherwise limit the scope of the claims. Should the Examiner believe that a telephone conversation will facilitate the prosecution of the above-identified application, the Examiner is invited to call Applicants' attorney at the number provided below.

Respectfully submitted,

MOLEX INCORPORATED

Dated: October 16, 2009

/Stephen L. Sheldon/  
Stephen L. Sheldon, Reg. No. 58,732  
MOLEX INCORPORATED  
2222 Wellington Court  
Lisle, Illinois 60432  
Tel.: (630) 527-4336  
Fax.: (630) 416-4962